

APPLICANT(S): PALTI, Yoram
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AMENDMENTS TO THE CLAIMS

Please add or amend the claims to read as follows, and cancel without prejudice or disclaimer to resubmission in a divisional or continuation application claims indicated as cancelled:

CLAIMS

1. (currently amended) A system for in vivo analysis, said system ~~comprising~~
comprising:
agglutinative particles capable of interacting with at least one analyte
so as to cause an optical change; and
at least one in vivo imaging system configured for detecting the optical
change.
2. (original) The system according to claim 1 comprising at least one illumination source.
3. (original) The system according to claim 1 comprising at least one chamber, said chamber configured for containing the agglutinative particles and an in vivo sample.
4. (original) The system according to claim 3 wherein the sampling chamber is at least partially transparent.
5. (original) The system according to claim 3 wherein the imaging system is configured for imaging the chamber.
6. (original) The system according to claim 1 wherein the imaging system is configured for imaging a body lumen.

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7. (original) The system according to claim 1 wherein the agglutinative particles include at least one molecule selected from the group consisting of: antibodies, antigens, cells or linkers.
8. (original) The system according to claim 3 wherein the at least one analyte is in the in vivo sample.
9. (original) The system according to claim 1 wherein the optical change is selected from the group consisting of: a change of color, a change of hue, a change of brightness, a change of intensity, a change of optical density, a change of transparency, a change of light scattering or any combination thereof.
10. (original) The system according to claim 1 wherein the in vivo imaging system includes at least a photodiode, a CCD or a CMOS.
11. (original) The system according to claim 6 wherein the body lumen is a gastrointestinal tract.
12. (original) The system according to claim 1 comprising a transmitter.
13. (original) The system according to claim 12 wherein the transmitter is configured for transmitting image data.
14. (currently amended) A device for in vivo analysis, said device comprising the system according to claim 1 [[or 12]].
15. (original) The device according to claim 14 wherein the device is selected from the group consisting of: needles, stents, endoscopes, catheters or ingestible capsules.
16. (original) An ingestible capsule comprising:

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an optical window, said window having immobilized thereto
agglutinative particles capable of interacting with at least one
analyte so as to cause an optical change;

at least one imaging system configured for detecting at least the optical
change; and

a transmitter configured for transmitting image data to an external
receiving system.

17. (original) The device according to claim 16 comprising at least one chamber, said
chamber configured for containing the agglutinative particles and an in vivo sample.

18. (original) A method for in vivo analysis, the method comprising the steps of:
obtaining a sample from a body lumen;
combining in vivo the sample with agglutinative particles; and
detecting at least one optical change in the combined sample.

19. (original) The method according to claim 18 wherein the step of detecting at least
one optical change includes imaging the combined sample.

20. (original) The method according to claim 18 comprising the step of obtaining at
least one image of the body lumen.

21. (currently amended) The method according to claim 18 [[or 20]] comprising the step
of transmitting data to an external receiving unit.